

BID SOLICITATION NOTICE

TO RECEIVE A BID PACKAGE, BIDDERS MAY EITHER DOWNLOAD THE REQUEST FOR BID ("RFB") FROM THE AUTHORITY'S WEBSITE AT <http://www.state.nj.us/turnpike/purchasing.html> OR REQUEST A BID BY COMPLETING THIS FORM AND FAXING IT TO THE NUMBER STATED BELOW. FOR RECORD KEEPING PURPOSES, THE AUTHORITY REQUESTS THAT THE BIDDER COMPLETE THIS FORM AND RETURN IT TO THE PROCUREMENT AND MATERIALS MANAGEMENT DEPARTMENT, EVEN WHEN A BIDDER IS DOWNLOADING THE RFB. THIS IS THE ONLY NOTICE OF BIDDING FOR THE FOLLOWING GOODS.

THE NEW JERSEY TURNPIKE AUTHORITY PROCUREMENT AND MATERIALS MANAGEMENT DEPARTMENT

New Jersey Turnpike Administrative Offices
P.O. Box 5042
581 Main Street
Woodbridge, New Jersey 07095-5042
Tel. - 732-750-5300 Ext. 8640 Fax - 732-750-5399

TITLE: **DIESEL-POWERED TRAILER-MOUNTED BRUSH CHIPPER**

BID NO: **R-120161**

DUE DATE: **NOVEMBER 30, 2015**

TIME: **11:00 AM**

SUBMIT BIDS BEFORE THE DUE DATE AND TIME STATED ABOVE TO THE ABOVE ADDRESS

BIDDER INFORMATION (PLEASE PRINT)

NAME OF BIDDING ENTITY

ADDRESS

CITY, STATE AND ZIP CODE

E-MAIL ADDRESS

REPRESENTATIVE TO CONTACT-NAME & TITLE

TELEPHONE NO.

FEDERAL TAX I.D. NO. or TAXPAYER I.D. NO.

FAX NO

☐ **WE HAVE DOWNLOADED THE BID FROM THE AUTHORITY WEBSITE**

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BUSINESS CORPORATION PARTNERSHIP INDIVIDUAL

OTHER (SPECIFY) _____

SECTION I

A. INTRODUCTION

The New Jersey Turnpike Authority (the “Authority”) was created by an act of the New Jersey Legislature in 1948, known as the New Jersey Turnpike Authority Act (as amended and supplemented, “Act”). The Act authorizes the Authority to construct, maintain, repair, and operate the New Jersey Turnpike, to collect tolls, and to issue Turnpike Revenue Bonds or Notes, subject to the approval of the Governor, payable from tolls and other revenues of the Authority. On May 27, 2003, the Act was amended to empower the Turnpike to assume all powers, rights, obligations and duties of the New Jersey Highway Authority (the “Highway Authority”), which owned and operated the Garden State Parkway and PNC Bank Arts Center. On July 9, 2003, the Authority assumed all powers, rights, obligations and duties of the Highway Authority. The Authority currently operates both the Garden State Parkway (“GSP”) and the New Jersey Turnpike (“Turnpike”) (both roads are collectively referred to herein as the (“Roadways”).

The Authority is governed by an eight member Board of Commissioners (“Board”). The Governor of New Jersey appoints each of its members and has the statutory authority to overturn an action of the Board by vetoing any Board action within 10 days of receiving the minutes of the meeting. The Board authorizes awards of all public contracts over \$35,000, except in cases where it has delegated authority to the Executive Director.

This bid solicitation is being conducted pursuant to the Authority’s enabling statute as found in N.J.S.A. 27.23-6.1 and Executive Order number 37 (Corzine 2006) and the regulations and policies of the Authority with regard to public bid procurement.

B. BIDDER GUIDELINES/CHECKLIST

BIDS THAT FAIL TO CONFORM TO THE FOLLOWING REQUIREMENTS MAY BE REJECTED:

1. The Request of Bid ("RFB"), including specifications and related bid documents ("Bids") must be received at or before the due date and time stated on the cover page at the following place: New Jersey Turnpike Authority, Administration Building, 581 Main Street, Woodbridge, New Jersey 07095. Late Bids will be returned unopened. Telephone or facsimile Bids will not be accepted.
2. **The entity submitting a Bid ("Bidder") must provide one original and one copy of the Bid.** The Bid must include all price information. Bid prices shall include delivery of all items F.O.B. destination or as otherwise provided. Price quotes must be firm through issuance of contract.
3. All Bid prices must be typed or written in ink. Quote the specified unit of measure. If bidding an alternate, provide detailed specifications.
4. All corrections, white-outs, erasures, re-striking of type, or other forms of alteration or the appearance of alteration, to unit and/or total prices must be initialed in ink by the Bidder.
5. The Bidder must attend the mandatory site inspection at the following date(s) and time(s) if applicable:
6. If checked this RFB requires the following mandatory document(s) or the Bid **will** be rejected:
 - (a) Bid Bond or Cashier's Check for 10% of the amount Bid or a Letter of Surety ☒
 - (b) Stockholder/Partnership Disclosure Statement ☒
7. See the Authority's Instruction to Bidders for a complete list of the Authority's standard contract Terms and Conditions, as well as required forms that must be included with the Bid (**SEE ATTACHED**).

The following checked documents are required for this Bid. Failure to submit the required forms may result in the rejection of the Bid.

- (a) State of New Jersey Division of Revenue Business Registration Certificate ☒
- (b) Certification of Registration with the Secretary of State (only if non-NJ corporation) ☒
- (c) Acknowledgement of requirement for Disclosure of Political Contributions (ELEC) ☒
- (d) Public Works Contractor Registration Certificate(s) (if applicable) ☐
- (e) Affirmative Action Information Sheet with Certificate or Form AA302 ☒
- (f) Signed Mandatory Equal Employment Opportunity Language ☒
- (g) SBE/WBE/MBE Certificates and Form ☐
- (h) Vendor Disclosure Form (EO129-Location of Services) ☒
- (i) Notice of Set-Off for State Tax (P.L. 1999, c 159) ☒
- (j) Automobile Insurance Liability Waiver ☐
- (k) Insurance Certificate ☒
- (l) Disclosure of Investment Activities in Iran ☒
8. 3-Year Open End Purchasing Option ☒
9. Bidder must sign Bid ☒

SECTION II

A. INTENTION

1. Sealed Bids for R-120161 must be received at the New Jersey Turnpike Authority Administrative Offices, 581 Main Street, Woodbridge, New Jersey 07095-5042, by the due date and time stated on the cover page of this “RFB” at which time and place said Bid will be opened and read in public.
2. Bidders mailing Bids should allow for their normal mail delivery time to ensure timely receipt of the Public Bids. **Please be advised that using an overnight/next-day delivery service does not guarantee overnight/next-day deliveries to our location. The Authority will not be responsible for any Bid not being received by the required date and time.**
3. It is the intention of the Authority to issue a Notice of Award for a price agreement for the procurement of: **DIESEL POWERED TRAILER MOUNTED BRUSH CHIPPER**
4. Items purchased under this contract will be delivered as directed by the Authority.
5. The term of the contract shall be for “one year with the option to extend for two additional one-year terms at the Authority’s discretion and the vendor’s concurrence”.
6. Please contact John J. Parmigiani with any questions regarding this procurement contract at 732-750-5300 x 8632 or jparmigiani@turnpike.state.nj.us.

B. BID SHEET INSTRUCTIONS

1. Bidders must follow all instructions in this RFB and in the Instructions to Bidders issued by the Authority, and any other documents issued by the Authority in connection with this RFB (collectively, “Bid Documents”).
2. Bidders must examine the bid documents carefully before bidding and must ask the Director of Procurement and Materials Management Department (“PMM”) in writing for any interpretation or correction of any apparent ambiguity, inconsistency or apparent error therein. If necessary, an interpretation or correction to the specifications shall be issued by the Director of PMM in response to inquiries and/or addendum shall be faxed to Bidders who have obtained the Bid Documents. Upon the issuing of an addendum, the addendum shall become part of the bid documents. **Requests for interpretation or correction shall be considered only if received at least 5 business days prior to the Bid opening date.** Written requests can be submitted by FAX at 732-750-5399.
3. The submission of the Bid is conclusive evidence that the Bidder is fully aware of the conditions, requirements, and details as stated in the Bid Documents. If the Bidder, prior to submitting its Bid, fails to notify the Director of PMM of the existence of an ambiguity or inconsistency in the Bid Documents, a Bid will conclusively be presumed to have been based upon the Authority’s interpretation of such ambiguity or inconsistency.

BID QUOTATION SHEET

ITEM	QUANTITY	UNIT	DESCRIPTION	UNIT PRICE	TOTAL DOLLAR AMOUNT
1	3	EA	DIESEL-POWERED TRAILER-MOUNTED BRUSH CHIPPER PER SPECIFICATIONS	\$	\$

ANY INQUIRIES CONCERNING THIS BID MUST BE SENT VIA FAX TO 732-750-5399 NO LATER THAN FIVE (5) BUSINESS DAYS BEFORE BID OPENING

NEW JERSEY TURNPIKE AUTHORITY

Andrea E. Ward
Director, PMM Department

Name of Company

Authorized Signature of Bidder

E. SIGNATURE PAGE

1. **ADDENDA / INQUIRIES:** COMPLETE (if applicable) BEFORE SUBMITTING BID:

Receipt of Addendum / Inquiries # _____ dated _____ is hereby acknowledged.

Receipt of Addendum / Inquiries # _____ dated _____ is hereby acknowledged.

☐

CHECK BOX IF NO ADDENDA/INQUIRY ISSUED

(All Addenda / Inquiries must be acknowledged as indicated above.)

2. **BID IRREVOCABLE:** This offer shall be irrevocable for ninety (90) working days after the date on which the Authority publicly opens this Bid except in those instances where an unsuccessful Bidder has filed a bid protest pursuant to N.J.A.C. 19:9-2.12. Upon notification of a protest, Bidders are required to hold their prices for an additional 90 days. All Bidders will be notified in writing of the action taken by the Authority.
3. **OFFER/CERTIFICATION:** The undersigned offers and agrees to furnish to the New Jersey Turnpike Authority the services and/or materials in compliance with all terms, conditions, specifications and addenda of the RFB, Bid Documents, and resulting contract. The undersigned further certifies understanding and compliance with the requirements of the standard terms and conditions as stated in the Instructions to Bidders included with the Bid Documents. The undersigned certifies that he or she executes this Bid with full authority so to do; and that all statements contained in this Bid and in this certification are true and correct, and made with full knowledge that the Authority relies upon the truth of the statements contained herein and in any statements requested by the Authority showing evidence of qualifications in awarding the contract.

I certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.

4. **AUTHORIZED SIGNATURE:** _____

Print Name and Title: _____

Bidder: _____

Address: _____

City, State, Zip: _____

E-mail address _____

Telephone #: _____ Fax: _____

Date: # _____

SECTION III

NO RESPONSE BID SURVEY

BID REQUISITION NUMBER: R-120161

PROPOSAL TITLE: DIESEL-POWERED TRAILER-MOUNTED BRUSH CHIPPER

If you do not choose to respond to this Bid, please complete the form below:

Name of Company_____

Reason you did not respond (Check all that apply)

_____ Cannot supply product or service

_____ Cannot meet technical specifications

_____ Cannot meet delivery specifications

_____ Cannot meet legal requirements
(i.e. Bid/performance/security/insurance, etc.)

_____ Cannot provide a competitive price at this time

_____ Interested in receiving specifications for informational purposes only

_____ Insufficient lead time to respond

_____ Other:(please be specific) _____

Do you wish to remain on our mailing list?

_____Yes

_____No

Additional comments: _____

Signed :(optional)_____

Company:_____

ADDITIONAL YEARS PURCHASING OPTION

BID TITLE: R-120161 DIESEL-POWERED TRAILER-MOUNTED BRUSH CHIPPER

3 - Year Open End Option: The Authority shall have the option for one (1) Model Year* from the date of Contract, to order additional units conforming to the requirements of these specifications at the same price and under the same terms and conditions as those contained herein.

The Authority shall further have the option to purchase additional units conforming to these specifications for two (2) additional Model Years. Any unit(s) offered during the two (2) subsequent Model Years shall be of the model equivalent to that specified herein. In the latter instances, if there have been any price changes, the vendor shall submit a request to the Authority covering the aforesaid price changes, and shall include appropriate explanation and justification for any such price changes.

Any such request for price adjustment shall be in writing and directed to the Director, Procurement and Materials Management Department and shall be accompanied by the following evidence as a basis for your request;

1. The published price lists for equipment, which were in effect at the time of your original proposal.
2. The equivalent published price lists in effect at the time of your request.
3. Any additional evidence which the Authority deems necessary in the evaluation of your request.

The Authority shall, within its sole discretion, have the right to accept the price changes proposed by the vendor or if it so desires, re-bid the requirement.

*Model Year is defined as the Model Year of the Manufacturer of the unit(s) offered by you in this Request for Quotation. In that instance where proposals are for equipment for which "Model Year" and "Production Cut-Off Dates" are undefined or non-existent, the "Model Year" is defined, for bid purposes, as one calendar year from the date on which the Contract is accepted. The last date on which orders may be placed for the Model currently in effect is_____.

NEW JERSEY TURNPIKE AUTHORITY

GENERAL INSTRUCTIONS AND SPECIFICATIONS FOR: DIESEL-POWERED TRAILER-MOUNTED BRUSH CHIPPER

Quantity	Description	Required Delivery Date
3	Diesel-Powered Trailer-Mounted Brush Chipper	150 Days After Receipt of Order

SPECIFICATIONS:

DPTMBC-2016: Diesel-Powered Trailer-Mounted Brush Chipper

7PTC: 7-Pole Round Pin Trailer Connectors on Trucks and Trailers

COMPLIANCE WITH RULES AND REGULATIONS: The unit and associated equipment furnished must comply with all Federal and State Motor Vehicle Safety Laws and Regulations and shall be capable of passing the New Jersey State Motor Vehicle Inspection Laws, where applicable.

ENERGY STAR REQUIREMENTS: If applicable for items specified in the bid package, the vendor must provide products that earn Energy Star Certification and meet the Energy Star specifications for energy efficiency. The vendor is encouraged to visit energystar.gov for complete product specifications and updated lists of qualifying products. The Energy Star label must also be affixed to each delivered item. The bidder's signature on the signature page certifies that items so indicated that have earned Energy Star and meet the Energy Star specifications or other standards for energy efficiency will be supplied.

ERRORS AND OMISSIONS: Inadvertent omissions or errors in the attached specifications must be brought to the attention of the New Jersey Turnpike Authority's Director of Procurement and Materials Management at 732-750-5300 before bid submission date. If, with knowledge of such error or omission and prior to the correction thereof, the bidder proceeds with any work affected hereby, they shall do so at their own risk and the work so done shall not be considered as work done under and in performance of this Agreement unless and until approved and accepted.

PILOT MODEL: Questions, which arise before or during the preparation of the pilot model, shall be addressed in writing via e-mail from the vendor to Peter Perperas (Project Supervisor), perperas@turnpike.state.nj.us at the New Jersey Turnpike Authority on a not to delay basis.

The awarded bidder shall make available one **fully completed** pilot model for inspection and approval by the Authority. The unit shall be transported (responsibility of the awarded vendor) to the NJTA Garden State Parkway Division's District 5 (Telegraph Hill) Maintenance Facility located at Garden State Parkway Exit 116 in Holmdel, NJ 07733.

REQUIRED DELIVERY DATE: In the event a bidder takes an exception to the Authority's required delivery date, they **must** note the exception on the attached exception sheet. Furthermore, a specific number of days **must** be listed. Under no circumstances shall bidders give approximate dates or ranges of dates to deliver such as: 210 days to 240 days. Failure to follow these guidelines may result in rejection of bid.

DELIVERY INSTRUCTIONS:

- A. Vendor must contact Peter Perperas (Project Supervisor) at 732-442-8600 ext. 2868 for authorization to schedule date and time prior to delivery. **Deliveries shall be made to the NJTA Garden State Parkway Division's District 5 Telegraph Hill Central Maintenance Facility located at GSP Exit 116 in Holmdel, NJ 07733.**
- B. Vendor shall be responsible for all delivery, shipping and pick-up expenses.
- C. All units must be pre-delivery serviced, completely assembled, operational, and cleaned prior to Authority delivery.
- D. The following administrative package **must** accompany all deliveries:
 - **Certificate of Origin:** stamped "Sales Tax Satisfied" and shall be made out to New Jersey Turnpike Authority, 581 Main St. Woodbridge, NJ 07095. Certificate of Origin shall have current date and be hand delivered to Peter Perperas after final acceptance of complete order.
 - **Invoice:** purchase order number must be displayed on vendors invoice. Invoice shall have current date and be hand delivered to Peter Perperas after final acceptance of complete order.
 - Warranty forms properly executed.
 - Four (4) keys for each unit shall be furnished.
 - Four (4) keys, keyed alike for toolboxes or similar compartments shall be furnished for each unit.
 - It shall be the responsibility of the awarded vendor that all tolls, when applicable be paid when making delivery to the Authority.
 - Delivery of all units fully completed and fully compliant shall be made no later than one hundred fifty (150) days after receipt of Purchase Order.
- E. All units shall be delivered with a minimum of a half tank of fuel.
- F. Deliveries made directly from the manufacturer (unless manufacturer is the awarded bidder) to the Authority shall **not** be acceptable.

WARRANTY: All units delivered must be guaranteed to be free from defects in materials, design and workmanship for a minimum of one (1) year (engine warranty shall be two (2) years/2,000 hours) from the time of acceptance by the New Jersey Turnpike Authority. All warranties shall start upon written acceptance of units by the New Jersey Turnpike Authority. Warranty must include service availability from any manufacturers authorized dealer establishment most closely located to Parkway and Turnpike area. This repair facility may not be further than 100 miles from District 5 Telegraph Hill Central Maintenance Facility in Holmdel, NJ 07733 or District 4 (Formerly Central Shops) Maintenance Facility located in Hightstown, NJ 08520. If warranty service is required, the vendor who supplied the unit shall provide for pickup, delivery and repair of unit at no charge to the New Jersey Turnpike Authority. The vendor shall also have a program to include an in-house warranty. All warranty periods shall start from date of acceptance of unit by the New Jersey Turnpike Authority.

EXCEPTION SHEET: Exception sheet is furnished with each set of specifications. Bidders making exceptions must note exceptions by item and indicate substitution in lieu and submit with bid, detailed specifications on the substitution. If the vendor is submitting an alternate product, component, feature or part to what is referenced in the specifications, the proposals **must** be accompanied by descriptive literature, marked and indicate the exact items to be furnished, with an engineering drawing of the same. **Failure to supply information requested may result in rejection of bid.** Where no exception is taken, the word "None" shall be neatly printed or typed on the exception sheet. **Failure to supply information and/or failure to complete the bidder's exception spaces in the prescribed manner may disqualify bid. It shall be understood that if no exception is taken, the vendor shall supply all material exactly as specified. No substitution will be permitted after receipt of bids.**

APPROVED EQUIVALENT: A bid substitution for a specified item brand and/or model that meets the required quality and performance standards of the original brand; substitutions will be determined to be an equivalent by the New Jersey Turnpike Authority.

UNIT INFORMATION FORM: Vendor shall complete the entire Unit Information Form. **Failure to complete form may result in rejection of bid.**

MANUFACTURER'S PRODUCTION SHEET: The vendor shall furnish one (1) copy of the actual Factory Production Sheet for each unit provided. The copies of the Factory Production Sheet shall be submitted at the time of the Authority's inspection of the unit.

TRAINING: It shall be the responsibility of the successful bidder to supply all safety, operational and service training to New Jersey Turnpike Authority personnel in accordance with all applicable ANSI and OSHA regulations. The safety and operational training shall consist of a complete review and understanding of the manufacturer's owner manual, along with actual operation of equipment. The instructor shall emphasize all proper uses for safe operation. The training shall include but not limited to all general troubleshooting of the hydraulic system and associated electronics. The instructor shall also emphasize the proper use of tools and test equipment along with general shop safety. The service seminars shall be similar to factory and manufacture type schools. The training shall be scheduled and take place at two (2) sites, eight (8) hours each site designated by the New Jersey Turnpike Authority.

LABELS: Plastic stick-on labels shall not be acceptable.

ADVERTISEMENTS: No Dealer advertisements shall appear on unit or any other related equipment.

ACCESSORIES: All accessories shall be manufacturer installed when the item is available from the manufacturer.

FACILITIES: Bidders shall represent a manufacturer, which has in operation a factory adequate for the manufacture of the equipment, which it proposes to furnish. The manufacture(s) whose associated equipment or products are bid shall have a full service warranty and parts supply facility that can guarantee availability of parts within 24 hours after telephone order and shall be located within a 100 mile radius of either District 4 Maintenance Facility (exit 8 on the NJ Turnpike) located in Hightstown, NJ 08520 or Telegraph Hill Central Maintenance Facility (exit 116 on the GSP) located in Holmdel, NJ 07733. This facility will be required to establish an in-house warranty program and provide all warranty work related to the equipment in the bid proposal. The bidder shall submit the locations, names and telephone numbers of people who are authorized to service the equipment or who can be reached for emergency service.

Location_____

Phone #_____

Contact_____

Name & Title

**SPECIFICATIONS: DPTMBC-2016
DIESEL-POWERED TRAILER-MOUNTED BRUSH CHIPPER**

INTENT: The intent of this specification is to describe and govern the purchase of a 2016 or new current model diesel-powered trailer-mounted brush chipper. Unit shall be a Vermeer Model BC1800XL or approved equivalent. The unit shall be new and of the latest design and be in current production at time of submission of bid. All standard and optional equipment shall be Original Equipment Manufacturer.

BIDDER'S INSTRUCTIONS

IT SHALL BE THE BIDDER'S RESPONSIBILITY TO CAREFULLY EXAMINE EACH ITEM OF THE SPECIFICATION. BIDDERS MUST INDICATE WHETHER THEY COMPLY OR NON-COMPLY FOR EACH LINE ITEM IN THE SPECIFICATION. FAILURE TO PROVIDE A COMPLETED BID MAY CAUSE REJECTION OF BID. ALL NON-COMPLY RESPONSES AND/OR BIDDERS PROPOSED "APPROVED EQUIVALENTS" MUST BE FULLY EXPLAINED ON EXCEPTION FORM, NOTING SECTION AND ITEM. FAILURE TO EXPLAIN NON-COMPLY RESPONSES OR FAILURE TO SUPPLY DETAILED LITERATURE/BROCHURES ON THE BIDDERS PROPOSED "APPROVED EQUIVALENTS" MAY CAUSE REJECTION OF BID. WHERE "MINIMUM/MAXIMUM" IS SPECIFIED, BIDDERS MUST PROPOSE AT LEAST THE MINIMUM/MAXIMUM SIZES OR THE BID MAY BE REJECTED.

	COMPLY	
	YES	NO
GENERAL:		
A. New current model diesel-powered trailer-mounted brush chipper.		
B. Unit shall be a Vermeer Model BC1800XL or approved equivalent.		
C. The unit shall be new and of the latest design and be in current production at time of submission of bid.		
D. Bidders must provide detailed specifications, technical sheets, and pictures describing exact unit and equipment that shall be provided.		
E. All standard and optional equipment shall be Original Equipment Manufacturer.		
F. Chipping capacity: 19".		
G. Length feed table: 16'9".		
H. Length feed table down: 19'3".		
I. Height: 8' 11".		
J. Weight: 9,960 lbs.		
K. Tongue weight: 1,300 lbs.		
L. Jack capacity: 12,500 lbs.		
M. Safety chains: 3/8" x 40".		

	COMPLY	
	YES	NO
N. Hitch: 2 $\frac{3}{8}$ " i.d.		
ENGINE:		
A. John Deere 4045HFC09 Tier IV emissions rated or approved equivalent.		
B. 4-cylinder diesel engine.		
C. 4.5 liter.		
D. Gross horsepower: 170 hp minimum @ 2,200 rpm's.		
E. Torque: 490 ft./lbs. @ 1,600 rpm's.		
F. Fuel tank capacity: 35-gallon minimum.		
G. Air cleaner: 2-stage dry type.		
H. Oil filter: spin-on type.		
I. Coolant capacity: 6-gallon.		
J. Electrical system: 12-volt.		
K. Alternator: 90-amps.		
L. Battery: maintenance free, 950 CCA.		
M. 12" spring loaded clutch.		
N. Fan: 26" suction type.		
O. Control: automatically lowers engine speed if no material has been chipped for 60 seconds of five minutes selectable by operator.		
FEED SYSTEM:		
A. Infeed opening: 20" x 24".		
B. Number of feed rollers: two (2).		
C. Feed roller diameter: 18".		
D. Feed roller height: 23 $\frac{1}{2}$ ".		
E. Orientation: vertical with eleven (11) helical cleats on each roller.		
F. 380 lbs. clamping force.		
G. Feed roller distance from drum at closet point: $\frac{1}{2}$ ".		
H. Two (2) hydraulic motors.		
I. 28 cubic inch displacement minimum.		
J. Shaft size: 1 $\frac{1}{4}$ ".		
K. Feed rate: 0-117 fpm, infinitely variable and hydraulically reversible by means of a control bar.		
L. Distance from center of feed rollers to end of fed table: 62 $\frac{1}{2}$ ".		
M. Feed sensing control system that shall monitor engine speed rpm's and automatically stops and reverses feed rollers when droop settings are reached, material feeding starts again when engine rpm/s have recovered (three droop settings shall be available for the operator to select from).		
SAFETY SYSTEM:		
A. Unit shall come equipped with a bottom feed stop safety bar.		
B. Bottom feed stop safety bar shall be located so the operator's leg can strike the bar shutting off the feed mechanism in the event of an emergency.		
C. A "reset/hold to run" button on each side of the infeed housing shall allow the operator to readily reset the system in the event the bar is tripped.		
D. Bottom feed stop safety bar: 2" diameter.		

	COMPLY	
	YES	NO
E. Normal sensitivity: 22°.		
F. Reduced sensitivity: 12°.		
G. Four (4) position feed control bar: <ul style="list-style-type: none"> • Emergency Stop • Forward • Neutral • Reverse 		
H. Radio remote control: control shall be able to activate, stop, reverse feed rollers, restart material feeding action, reset control system, and shut off engine.		
CUTTING SYSTEM:		
A. Drum diameter: 36".		
B. Drum width: 26".		
C. Drum thickness: ½".		
D. Speed: 1,100 rpm's.		
E. Number of knives: four (4).		
F. Material: A8 chipper steel.		
G. Knife size: 5.5" x 10" x .625".		
H. Bed knife size: 20¼" x 3".		
I. Bed knife thickness: 1.3".		
J. Number of bed knife edges: four (4).		
CUTTER DRIVE COMPONENTS:		
A. Number of bearings: two (2).		
B. Spherical roller type.		
C. Belt idler/tensioner: spring loaded.		
D. Dynamic capacity: 41,800 lbs.		
E. Static capacity: 71,500 lbs.		
DISCHARGE SYSTEM:		
A. Chute height: 8' 11".		
B. Chute rotation angle: 270°.		
C. Rotation type shall be worm gear with rotational lock.		
D. Thicknesses: <ul style="list-style-type: none"> • Top: ⅓" • Bottom: 1/10" • Side: 1/10" 		
HYDRAULIC SYSTEM:		
A. System type: open center.		
B. Hydraulic system and oil tank capacity shall be sufficient and also designed to operate brush chipper at the manufacturer's appropriate performance standards.		
INSTRUMENTATION:		
A. Digital display that toggles between hour meter, rpm's, oil pressure, water temperature, voltage, and engine fault codes.		

	COMPLY	
	YES	NO
B. High coolant temperature/low oil pressure automatic engine shutdown.		
C. Fuel gauge.		
D. Diesel Exhaust Fluid (DEF) gauge.		
CHASSIS:		
A. Frame shall be 7" x 2.13" channel design.		
B. Tongue: 4" x 4" x .375".		
C. Extended tongue: 24".		
D. Hitch: pintle type 2 $\frac{3}{8}$ " i.d. adjusted vertically by 4 $\frac{1}{2}$ ".		
E. Axle/suspension shall be designed and applicably rated to fully accommodate unit per manufacturer's standards.		
F. Capacity: 10,000 lbs.		
G. 14-gauge integrated fenders.		
H. Jack: 10,000 lbs. manual type.		
I. Tires: 235/75R17.5 load range J.		
J. Brakes: electric with break-away switch.		
K. Wiring harness: 48" long, 7-prong round pin trailer plug shall be wired per SAE code J506B (See Specification: 7PTC).		
L. Lights shall be LED type: stop, tail, and turn (rear mounted lights shall have brush guards).		
M. Wheels; 17.5" x 6.75".		
N. Tires: 235/75R17.5 load range J.		
WINCH:		
A. Brush chipper shall be equipped with a winch.		
B. Winch rope shall be 7/16" thick.		
C. Rope length shall be 150'.		
D. Rope line pull: 2,000 lbs.		
E. Line breaking strength: 14,000 lbs.		
F. Winch controls: <ul style="list-style-type: none"> • Forward • Reverse • Free Spool 		
G. Rope choker chain size: $\frac{1}{4}$ ".		
H. Winch interlock system: winch line must be stored on interlock hook prior to feed rollers start pulling material into chipper.		
PAINT:		
A. Clean virgin metal and de-slag welds.		
B. Unit shall be painted DuPont Dulux Omaha Orange Enamel # 93-082 or approved equal.		
C. The paint shall be applied in a two-step process with the orange base coat and additional polyurethane overcoat.		
MANUALS:		
A. The following manuals shall be supplied at time of delivery for each brush chipper ordered:		

	COMPLY	
	YES	NO
<ul style="list-style-type: none"> • Operation-2 • Maintenance-1 • Repair-1 • Parts-1 		

SPECIFICATIONS: 7PTC

7-POLE ROUND PIN TRAILER CONNECTORS ON TRUCKS AND TRAILERS

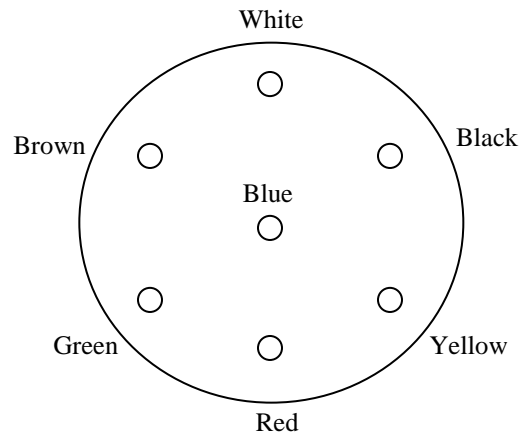
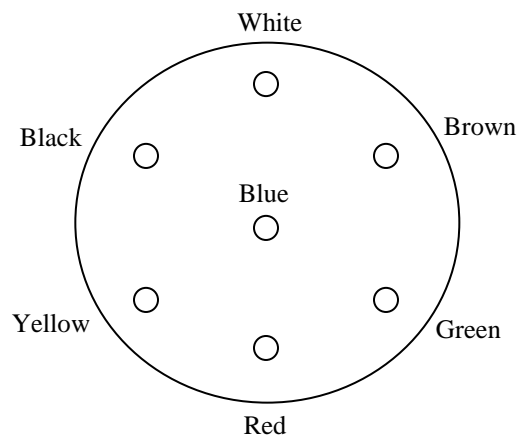
CONNECTOR MARKING COLOR

APPLICATION

WHITE.....	GROUND
BLACK.....	TAIL LIGHT
BROWN.....	TAIL LIGHT
YELLOW.....	LEFT TURN SIGNAL
GREEN.....	RIGHT TURN SIGNAL
RED.....	ELECTRIC BRAKE
BLUE.....	12-VOLT BATTERY- WITH 30-AMP AUTOMATIC BIMETAL THERMAL RESET CIRCUIT PROTECTION.

SOCKET MARKINGS

PLUG MARKINGS



[illegible]

Date _____